

Record Information

1. Site Name: Mobile Waste Controls  
(as entered in CERCLIS)
2. Site CERCLIS Number: TXD988051652
3. Site Reviewer: Vicki Harting (Ecology & Environment)
4. Date: June 30, 1994
5. Site Location: Houston/Harris, Texas  
(City/County, State)
6. Congressional District: 7,8,9,18,22,25
7. Site Coordinates: Single  
Latitude: 29°37'19. Longitude: 95°13'59.

Site Description

1. Setting: Urban
2. Current Owner: Federal
3. Current Site Status: Inactive
4. Years of Operation: Inactive Site, from and to dates: 1969-1974
5. How Initially Identified: Unknown
6. Entity Responsible for Waste Generation:
  - Landfill
  - Both
7. Site Activities/Waste Deposition:
  - Municipal Landfill
  - Industrial Landfill

9351625



Waste Description

8. Wastes Deposited or Detected Onsite:

- Organic Chemicals
- Pesticides/Herbicides
- Metals
- Municipal Waste
- PCBs

Response Actions

9. Response/Removal Actions:

- Other Removal Action Has Occurred

RCRA Information

10. For All Active Facilities, RCRA Site Status:

- Not Applicable

Demographic Information

11. Workers Present Onsite: No

12. Distance to Nearest Non-Worker Individual: > 10 Feet - 1/4 Mile

13. Residential Population Within 1 Mile: 1946.0

14. Residential Population Within 4 Miles: 50000.0

Water Use Information

15. Local Drinking Water Supply Source:

- Ground Water (within 4 mile distance limit)
- Surface Water (within 15 mile distance limit)

16. Total Population Served by Local Drinking Water Supply Source: 5710.0

**PREscore 2.0 - PRESCORE.TCL File 05/11/93**  
**NPL Characteristics Data Collection Form**  
**Mobile Waste Controls - 06/30/94**

**PAGE: 3**

**17. Drinking Water Supply System Type for Local Drinking  
Water Supply Sources:**

- Municipal (Services over 25 People)
- Private

**18. Surface Water Adjacent to/Draining Site:**

- Lake

**PREscore 2.0 - PRESCORE.TCL File 05/11/93**  
**HRS DOCUMENTATION RECORD**  
**Mobile Waste Controls - 06/30/94**

**PAGE: 1**

1. Site Name: Mobile Waste Controls  
(as entered in CERCLIS)
2. Site CERCLIS Number: TXD988051652
3. Site Reviewer: Vicki Harting (Ecology & Environment)
4. Date: June 30, 1994
5. Site Location: Houston/Harris, Texas  
(City/County,State)
6. Congressional District: 7,8,9,18,22,25
7. Site Coordinates: Single

Latitude: 29°37'19.

Longitude: 95°13'59.

	Score
Ground Water Migration Pathway Score (Sgw)	21.97
Surface Water Migration Pathway Score (Ssw)	26.24
Soil Exposure Pathway Score (Ss)	0.98
Air Migration Pathway Score (Sa)	17.76
Site Score	19.29

**NOTE**

EPA uses the terms "facility," "site," and "release" interchangeably. The term "facility" is broadly defined in CERCLA to include any area where hazardous substances have "come to be located" (CERCLA Section 109(9)), and the listing process is not intended to define or reflect boundaries of such facilities or releases. Site names, and references to specific parcels or properties, are provided for general identification purposes only. Knowledge regarding the extent of sites will be refined as more information is developed during the RI/FS and even during implementation of the remedy.

**PREscore 2.0 - PRESCORE.TCL File 05/11/93**  
**GROUND WATER MIGRATION PATHWAY SCORESHEET**  
**Mobile Waste Controls - 06/30/94**

**PAGE: 2**

GROUND WATER MIGRATION PATHWAY Factor Categories & Factors	Maximum Value	Value Assigned
Likelihood of Release to an Aquifer Aquifer: Chicot		
1. Observed Release	550	550
2. Potential to Release		
2a. Containment	10	10
2b. Net Precipitation	10	3
2c. Depth to Aquifer	5	5
2d. Travel Time	35	35
2e. Potential to Release [lines 2a(2b+2c+2d)]	500	430
3. Likelihood of Release	550	550
Waste Characteristics		
4. Toxicity/Mobility	*	1.00E+04
5. Hazardous Waste Quantity	*	100
6. Waste Characteristics	100	32
Targets		
7. Nearest Well	50	2.00E+01
8. Population		
8a. Level I Concentrations	**	0.00E+00
8b. Level II Concentrations	**	0.00E+00
8c. Potential Contamination	**	7.30E+01
8d. Population (lines 8a+8b+8c)	**	7.30E+01
9. Resources	5	5.00E+00
10. Wellhead Protection Area	20	5.00E+00
11. Targets (lines 7+8d+9+10)	**	1.03E+02
12. Targets (including overlaying aquifers)	**	1.03E+02
13. Aquifer Score	100	21.97
GROUND WATER MIGRATION PATHWAY SCORE (Sgw)	100	21.97

\* Maximum value applies to waste characteristics category.  
\*\* Maximum value not applicable.

**PREscore 2.0 - PRESCORE.TCL File 05/11/93**      **PAGE: 3**  
**SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT SCORESHEET**  
**Mobile Waste Controls - 06/30/94**

<b>SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT Factor Categories &amp; Factors DRINKING WATER THREAT</b>	<b>Maximum Value</b>	<b>Value Assigned</b>
<b>Likelihood of Release</b>		
1. Observed Release	550	0
2. Potential to Release by Overland Flow		
2a. Containment	10	10
2b. Runoff	25	1
2c. Distance to Surface Water	25	25
2d. Potential to Release by Overland Flow [lines 2a(2b+2c)]	500	260
3. Potential to Release by Flood		
3a. Containment (Flood)	10	10
3b. Flood Frequency	50	7
3c. Potential to Release by Flood (lines 3a x 3b)	500	70
4. Potential to Release (lines 2d+3c)	500	330
5. Likelihood of Release	550	330
<b>Waste Characteristics</b>		
6. Toxicity/Persistence	*	1.00E+04
7. Hazardous Waste Quantity	*	100
8. Waste Characteristics	100	32
<b>Targets</b>		
9. Nearest Intake	50	0.00E+00
10. Population		
10a. Level I Concentrations	**	0.00E+00
10b. Level II Concentrations	**	0.00E+00
10c. Potential Contamination	**	0.00E+00
10d. Population (lines 10a+10b+10c)	**	0.00E+00
11. Resources	5	5.00E+00
12. Targets (lines 9+10d+11)	**	5.00E+00
<b>13. DRINKING WATER THREAT SCORE</b>	<b>100</b>	<b>0.64</b>

\* Maximum value applies to waste characteristics category.  
\*\* Maximum value not applicable.

**PREscore 2.0 - PRESCORE.TCL File 05/11/93      PAGE: 4**  
**SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT SCORESHEET**  
**Mobile Waste Controls - 06/30/94**

SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT Factor Categories & Factors HUMAN FOOD CHAIN THREAT	Maximum Value	Value Assigned
Likelihood of Release		
14. Likelihood of Release (same as line 5)	550	330
Waste Characteristics		
15. Toxicity/Persistence/Bioaccumulation	*	5.00E+08
16. Hazardous Waste Quantity	*	100
17. Waste Characteristics	1000	320
Targets		
18. Food Chain Individual	50	2.00E+01
19. Population		
19a. Level I Concentrations	**	0.00E+00
19b. Level II Concentrations	**	0.00E+00
19c. Pot. Human Food Chain Contamination	**	3.00E-03
19d. Population (lines 19a+19b+19c)	**	3.00E-03
20. Targets (lines 18+19d)	**	2.00E+01
21. HUMAN FOOD CHAIN THREAT SCORE	100	25.60

\* Maximum value applies to waste characteristics category.  
\*\* Maximum value not applicable.

**PREscore 2.0 - PRESCORE.TCL File 05/11/93**  
**SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT SCORESHEET**  
**Mobile Waste Controls - 06/30/94**

**PAGE: 5**

<b>SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT Factor Categories &amp; Factors ENVIRONMENTAL THREAT</b>	<b>Maximum Value</b>	<b>Value Assigned</b>
<b>Likelihood of Release</b>		
<b>22. Likelihood of Release (same as line 5)</b>	<b>550</b>	<b>330</b>
<b>Waste Characteristics</b>		
<b>23. Ecosystem Toxicity/Persistence/Bioacc.</b>	<b>*</b>	<b>5.00E+08</b>
<b>24. Hazardous Waste Quantity</b>	<b>*</b>	<b>100</b>
<b>25. Waste Characteristics</b>	<b>1000</b>	<b>320</b>
<b>Targets</b>		
<b>26. Sensitive Environments</b>		
26a. Level I Concentrations	<b>**</b>	<b>0.00E+00</b>
26b. Level II Concentrations	<b>**</b>	<b>0.00E+00</b>
26c. Potential Contamination	<b>**</b>	<b>0.00E+00</b>
26d. Sensitive Environments (lines 26a+26b+26c)	<b>**</b>	<b>0.00E+00</b>
<b>27. Targets (line 26d)</b>	<b>**</b>	<b>0.00E+00</b>
<b>28. ENVIRONMENTAL THREAT SCORE</b>	<b>60</b>	<b>0.00</b>
<b>29. WATERSHED SCORE</b>	<b>100</b>	<b>26.24</b>
<b>30. SW: OVERLAND/FLOOD COMPONENT SCORE (Sof)</b>	<b>100</b>	<b>26.24</b>

\* Maximum value applies to waste characteristics category.  
\*\* Maximum value not applicable.

**PREscore 2.0 - PRESCORE.TCL File 05/11/93**  
**SOIL EXPOSURE PATHWAY SCORESHEET**  
**Mobile Waste Controls - 06/30/94**

**PAGE: 6**

SOIL EXPOSURE PATHWAY Factor Categories & Factors RESIDENT POPULATION THREAT	Maximum Value	Value Assigned
Likelihood of Exposure		
1. Likelihood of Exposure	550	550
Waste Characteristics		
2. Toxicity	*	1.00E+04
3. Hazardous Waste Quantity	*	10
4. Waste Characteristics	100	18
Targets		
5. Resident Individual	50	0.00E+00
6. Resident Population		
6a. Level I Concentrations	**	0.00E+00
6b. Level II Concentrations	**	0.00E+00
6c. Resident Population (lines 6a+6b)	**	0.00E+00
7. Workers	15	0.00E+00
8. Resources	5	0.00E+00
9. Terrestrial Sensitive Environments	***	0.00E+00
10. Targets (lines 5+6c+7+8+9)	**	0.00E+00
11. RESIDENT POPULATION THREAT SCORE	**	0.00E+00

\* Maximum value applies to waste characteristics category.

\*\* Maximum value not applicable.

\*\*\* No specific maximum value applies, see HRS for details.

**PREscore 2.0 - PRESCORE.TCL File 05/11/93**  
**SOIL EXPOSURE PATHWAY SCORESHEET**  
**Mobile Waste Controls - 06/30/94**

**PAGE: 7**

<b>SOIL EXPOSURE PATHWAY Factor Categories &amp; Factors NEARBY POPULATION THREAT</b>	<b>Maximum Value</b>	<b>Value Assigned</b>
<b>Likelihood of Exposure</b>		
12. Attractiveness/Accessibility	100	7.50E+01
13. Area of Contamination	100	1.00E+02
14. Likelihood of Exposure	500	5.00E+02
<b>Waste Characteristics</b>		
15. Toxicity	*	1.00E+04
16. Hazardous Waste Quantity	*	10
17. Waste Characteristics	100	18
<b>Targets</b>		
18. Nearby Individual	1	1.00E+00
19. Population Within 1 Mile	**	8.00E+00
20. Targets (lines 18+19)	**	9.00E+00
<b>21. NEARBY POPULATION THREAT SCORE</b>	<b>**</b>	<b>8.10E+04</b>
<b>SOIL EXPOSURE PATHWAY SCORE (Ss)</b>	<b>100</b>	<b>0.98</b>

\* Maximum value applies to waste characteristics category.  
 \*\* Maximum value not applicable.

**PREscore 2.0 - PRESCORE.TCL File 05/11/93**  
**AIR PATHWAY SCORESHEET**  
**Mobile Waste Controls - 06/30/94**

**PAGE: 8**

<b>AIR MIGRATION PATHWAY Factor Categories &amp; Factors</b>	<b>Maximum Value</b>	<b>Value Assigned</b>
<b>Likelihood of Release</b>		
1. Observed Release	550	0
2. Potential to Release		
2a. Gas Potential to Release	500	440
2b. Particulate Potential to Release	500	220
2c. Potential to Release	500	440
3. Likelihood of Release	550	440
<b>Waste Characteristics</b>		
4. Toxicity/Mobility	*	1.00E+04
5. Hazardous Waste Quantity	*	100
6. Waste Characteristics	100	32
<b>Targets</b>		
7. Nearest Individual	50	2.00E+01
8. Population		
8a. Level I Concentrations	**	0.00E+00
8b. Level II Concentrations	**	0.00E+00
8c. Potential Contamination	**	7.90E+01
8d. Population (lines 8a+8b+8c)	**	7.90E+01
9. Resources	5	5.00E+00
10. Sensitive Environments		
10a. Actual Contamination	***	0.00E+00
10b. Potential Contamination	***	4.20E-02
10c. Sens. Environments(lines 10a+10b)	***	4.20E-02
11. Targets (lines 7+8d+9+10c)	**	1.04E+02
<b>AIR MIGRATION PATHWAY SCORE (Sa)</b>	<b>100</b>	<b>1.78E+01</b>

\* Maximum value applies to waste characteristics category.

\*\* Maximum value not applicable.

\*\*\* No specific maximum value applies, see HRS for details.

**1. WASTESTREAM QUANTITY SUMMARY TABLE, SOURCE: Landfill**

<b>a. Wastestream ID</b>	
<b>b. Hazardous Constituent Quantity (C) (lbs.)</b>	<b>0.00</b>
<b>c. Data Complete?</b>	<b>NO</b>
<b>d. Hazardous Wastestream Quantity (W) (lbs.)</b>	<b>0.00</b>
<b>e. Data Complete?</b>	<b>NO</b>
<b>f. Wastestream Quantity Value (W/5,000)</b>	<b>0.00E+00</b>

**Documentation for Constituents:**

**There is insufficient data to determine the Hazardous Constituent Waste Quantity, Tier A; therefore, Tiers B, C or D will be evaluated for a hazardous waste quantity.**

**Reference: 1**

**Documentation for Wastestream Quantity:**

**There is insufficient data to determine a Hazardous Wastestream Quantity, Tier B; therefore, Tiers C or D will be evaluated for waste quantity.**

**Reference: 1**

## WASTE QUANTITY

Mobile Waste Controls - 06/30/94

## 2. SOURCE HAZARDOUS WASTE QUANTITY FACTOR TABLE

a. Source ID		Landfill	
b. Source Type		Landfill	
c. Secondary Source Type		N.A.	
d. Source Vol.(yd3/gal)	Source Area (ft2)	0.00	937500.00
e. Source Volume/Area Value		2.76E+02	
f. Source Hazardous Constituent Quantity (HCQ) Value (sum of 1b)		0.00E+00	
g. Data Complete?		NO	
h. Source Hazardous Wastestream Quantity (WSQ) Value (sum of 1f)		0.00E+00	
i. Data Complete?		NO	
k. Source Hazardous Waste Quantity (HWQ) Value (2e, 2f, or 2h)		2.76E+02	

Source Hazardous Substances	Depth (feet)	Liquid	Concent.	Units
Chromium	> 2	YES	7.6E+01	ppm
Copper	> 2	YES	5.0E+01	ppm
Iron	> 2	YES	3.1E+01	ppm
PCBs	< 2	NO	1.8E+00	ppm

## Documentation for Source Type:

The site was operated as a sand quarrying operation and 5 sandpits were located on-site. In 1970, one of the sandpits (Area A) was converted into a landfill, after the City Public Health Department issued a permit. The landfill was capped, but construction of a road transversing the landfill breached the cap in the early 1980's (Ref. 4, pp. 1-2).

Reference: 4

Documentation for Source Hazardous Substances:

Chemical analyses of soil samples collected around the area of the landfill detected the presence of chromium, copper, and aroclor in concentrations three times above the background sample (SO 3) concentrations: Chromium (14.1 ppm); Copper (7.7 ppm); Aroclor-1248 (< .037 ppm); Aroclor-1254 (0.099 ppm).

Chromium (76.5 ppm) and copper (50.3 ppm) were found in Station SO-10 and aroclor-1248 (1.8 ppm) and aroclor-1254 (1.2 ppm) in Station SO 1.

Chromium (0.015 ppm), iron (30.8 ppm) and copper (0.159 ppm) were detected in monitoring well sample GW-7 (Monitoring Well 10) (Ref. 6, pp. 9, 18-19).

The greatest concentration found in either the soil or ground water samples were used to characterize the source.

Reference: 6

Documentation for Source Area:

Measurements for the landfill were estimated from site maps included in the SSI documentation package. The following calculations for area were made:

1250 feet x 750 feet = 937,500 sq. feet

Reference: 1,4,5

## WASTE QUANTITY

Mobile Waste Controls - 06/30/94

## 3. SITE HAZARDOUS WASTE QUANTITY SUMMARY

No. Source ID	Migration Pathways	Vol. or Area Value (2e)	Constituent or Wastestream Value (2f,2h)	Hazardous Waste Qty. Value (2k)
1 Landfill	GW-SW-SE-A	2.76E+02	0.00E+00	2.76E+02

## WASTE QUANTITY

Mobile Waste Controls - 06/30/94

## 4. PATHWAY HAZARDOUS WASTE QUANTITY AND WASTE CHARACTERISTICS SUMMARY TABLE

Migration Pathway	Contaminant Values	HWQVs*	WCVs**
Ground Water	Toxicity/Mobility 1.00E+04	100	32
SW: Overland Flow, DW	Tox./Persistence 1.00E+04	100	32
SW: Overland Flow, HFC	Tox./Persis./Bioacc. 5.00E+08	100	320
SW: Overland Flow, Env	Etox./Persis./Bioacc. 5.00E+08	100	320
SW: GW to SW, DW	Tox./Persistence 1.00E+04	100	32
SW: GW to SW, HFC	Tox./Persis./Bioacc. 5.00E+06	100	100
SW: GW to SW, Env	Etox./Persis./Bioacc. 5.00E+07	100	180
Soil Exposure:Resident	Toxicity 1.00E+04	10	18
Soil Exposure: Nearby	Toxicity 1.00E+04	10	18
Air	Toxicity/Mobility 1.00E+04	100	32

\* Hazardous Waste Quantity Factor Values

\*\* Waste Characteristics Factor Category Values

Note: SW = Surface Water  
 GW = Ground Water  
 DW = Drinking Water Threat  
 HFC = Human Food Chain Threat  
 Env = Environmental Threat

**PREscore 2.0 - PRESCORE.TCL File 05/11/93**  
**GROUND WATER PATHWAY AQUIFER SUMMARY**  
**Mobile Waste Controls - 06/30/94**

**PAGE: 14**

No. Aquifer ID	Type	Overlaying No.	Inter-Connected with	Likelihood of Release	Targets
1 Chicot	Non K	0	0	550	1.03E+02
2 Evangeline	Non K	1	1	550	1.03E+02

**Containment**

No.	Source ID	HWQ Value	Containment Value
1	Landfill	2.76E+02	10
=====			
	Containment Factor		10

**Documentation for Ground Water Containment, Source Landfill:**

**Chromium, copper and iron were found in ground water samples taken from the monitoring wells screened in the Chicot Aquifer in concentrations greater than three times the background.**

**Because there is evidence of hazardous substance migration from the source area and no liner is under the landfill, this source was assigned a containment factor value of 10 according to Table 3-2 of the HRS (Ref. 1; Ref. 4, p. 1; Ref. 6, p. 9).**

**Reference: 1,4,6**

**Net Precipitation**

Net Precipitation (inches)	12.3
----------------------------	------

**Documentation for Net Precipitation:**

**The net precipitation for Houston, Texas is 12.3 inches (Ref. 7).**

**Reference: 7**

Aquifer: Chicot

Type of Aquifer: Non Karst

Overlaying Aquifer: 0

Interconnected with: 0

Documentation for Chicot Aquifer:

The site is underlain by the Chicot aquifer. The Chicot aquifer is composed of the Willis Sand, Bentley and Montgomery Formations, Beaumont Clay, and any overlying Holocene alluvium. In the vicinity of the site, the Chicot aquifer reaches an average thickness of approximately 600 - 1000 feet (Ref. 4, p. 20; Ref.5, p. 11). The Chicot Aquifer includes all deposits from the land surface to the top of the Evangeline Aquifer (Ref. 14, p. 10). The depth to ground water at the site is approximately 2 feet (Ref.12, p. 121).

Reference: 4,5,10,12,14

OBSERVED RELEASE

No.	Well ID	Well Type	Distance (miles)	Level of Contamination
1	GW-7 sample	Monitoring Well	0.010	Level II

Well

No.	Hazardous Substance	Concent.	MCL	Cancer	RFD	Units
1	Chromium	1.5E+01	1.0E+02	0.0E+00	1.8E+02	ppb
1	Copper	1.6E+02	0.0E+00	0.0E+00	0.0E+00	ppb
1	Iron	3.1E+04	0.0E+00	0.0E+00	0.0E+00	ppb

Observed Release Factor 550

**Documentation for Well GW-7 sample:**

**GW-7 sample was taken from monitoring well MW-10 constructed inside the disposal pit and provides data which can be used to characterize the ground water directly beneath the disposed material. Chemical analyses of sample GW-7 collected around Area A detected the presence of chromium, copper and iron in concentrations three times above the background concentrations, which qualifies as an observed release (Ref. 6, p. 9).**

**There is no analytical evidence indicating that drinking water was contaminated (Ref. 5, p. 20).**

**Reference: 5,6**

POTENTIAL TO RELEASE

Containment

Containment Factor 10

Net Precipitation

Net Precipitation Factor 3

Depth to Aquifer

A. Depth of Hazardous Substances 8.00 feet

Documentation for Depth of Hazardous Substances:

Chromium, copper and iron were detected in samples collected from MW-10 (GW-7). MW-10 is 25 feet in depth and has a screened interval of 8 to 18 feet. The depth of contamination is at least 8 feet deep (Ref. 6, pp. 5 & 9). The Chicot Aquifer includes all deposits from land surface to the Evangeline Aquifer and is located at the depth of contamination (Ref. 12, p. 121; Ref. 14).

Reference: 6,12,14

B. Depth to Aquifer from Surface 8.00 feet

Documentation for Depth to Aquifer from Surface :

An observed release to ground water has been documented; therefore, potential to release will not be evaluated (Ref. 1, Section 3.1.2; Ref. 6, p. 9). The aquifer to surface depth is approximately 8 feet at the site area (Ref. 14).

Reference: 1,6,14

C. Depth to Aquifer (B - A) 0.00 feet

Depth to Aquifer Factor 5

Travel Time

Are All Layers Karst? NO

Documentation for Karst Layers:

The site is not located on karst terrain.

Reference: 12,13

Thickness of Layer(s) with Lowest Conductivity 0.00 feet

Documentation for Thickness of Layers with Lowest Conductivity:

An observed release to ground water has been documented; therefore, potential to release will not be evaluated (Ref. 1, Section 3.1.2).

Reference: 1

Hydraulic Conductivity (cm/sec) 0.0E-00

Documentation for Hydraulic Conductivity:

An observed release to ground water has been documented; therefore, potential to release will not be evaluated (Ref. 1, Section 3.1.2).

Reference: 1

Travel Time Factor

35

=====

Potential to Release Factor

430

Aquifer: Evangeline

Type of Aquifer: Non Karst

Overlaying Aquifer: 1

Interconnected with: 1

Documentation for Evangeline Aquifer:

The Evangeline Aquifer underlies and interconnects the Chicot Aquifer (Ref.10). The upper 100 ft at the site is composed of lintels of red, tan, and light gray sand, silty and clay sand, sandy clay and clay (Ref. 4, p. 19).

The interconnection of the Upper Chicot, Lower Chicot and Evangeline Aquifers is seen in the corresponding water-level changes in the 1977-91 and 1990-1991 U.S.G.S. Survey (Ref.10).

Reference: 4,10

OBSERVED RELEASE

No.	Well ID	Well Type	Distance (miles)	Level of Contamination
-----	---------	-----------	---------------------	------------------------

- N/A and/or data not specified

=====

Observed Release Factor	0
-------------------------	---

POTENTIAL TO RELEASE

Containment

Containment Factor 10

Net Precipitation

Net Precipitation Factor 3

Depth to Aquifer

A. Depth of Hazardous Substances 8.00 feet

Documentation for Depth of Hazardous Substances:

Arsenic and manganese were detected in samples collected from MW-2. MW-2 is 25 feet in depth and has a screened interval of 8 to 18 feet. The depth of contamination is at least 8 feet deep (Ref. 6, p. 5 & 9). The Evangeline Aquifer is located at approximately 600 -1000 feet (Ref. 4, p. 20).

Reference: 4,6,12,14

B. Depth to Aquifer from Surface 600.00 feet

Documentation for Depth to Aquifer from Surface :

The Evangeline Aquifer lies underneath the Chicot Aquifer (Ref. 4, p. 20; Ref. 10). The lower Chicot is found at depths of 600 to 1000 feet (Ref. 4, p. 20).

Reference: 4,10

C. Depth to Aquifer (B - A) 592.00 feet

Depth to Aquifer Factor 1

Travel Time

Are All Layers Karst? NO

Thickness of Layer(s) with Lowest Conductivity 0.00 feet

Hydraulic Conductivity (cm/sec) 0.0E-00

Travel Time Factor 5

=====

Potential to Release Factor 90

**PREscore 2.0 - PRESCORE.TCL File 05/11/93**  
**GROUND WATER PATHWAY WASTE CHARACTERISTICS**  
**Mobile Waste Controls - 06/30/94**

**PAGE: 23**

Source: 1 Landfill

Source Hazardous Waste Quantity Value: 275.74

Hazardous Substance	Toxicity Value	Mobility Value	Toxicity/ Mobility Value
Chromium	10000	1.00E-02	1.00E+02
Copper	100	1.00E-02	1.00E+00
Iron	100	1.00E-02	1.00E+00
PCBs	10000	2.00E-07	2.00E-03

**PREscore 2.0 - PRESCORE.TCL File 05/11/93**  
**GROUND WATER PATHWAY WASTE CHARACTERISTICS**  
**Mobile Waste Controls - 06/30/94**

**PAGE: 24**

**Hazardous Substances Found in an Observed Release**

<b>Well No.</b>	<b>Observed Release Hazardous Substance</b>	<b>Toxicity Value</b>	<b>Mobility Value</b>	<b>Toxicity/ Mobility Value</b>
1	Chromium	10000	1.00E+00	1.00E+04
1	Copper	100	1.00E+00	1.00E+02
1	Iron	100	1.00E+00	1.00E+02

**PREscore 2.0 - PRESCORE.TCL File 05/11/93**  
**GROUND WATER PATHWAY WASTE CHARACTERISTICS**  
**Mobile Waste Controls - 06/30/94**

**PAGE: 25**

Toxicity/Mobility Value from Source Hazardous Substances:	1.00E+02
Toxicity/Mobility Value from Observed Release Hazardous Substances:	1.00E+04
Toxicity/Mobility Factor:	1.00E+04
Sum of Source Hazardous Waste Quantity Values:	2.76E+02
Hazardous Waste Quantity Factor:	100
Waste Characteristics Factor Category:	32

**PREscore 2.0 - PRESCORE.TCL File 05/11/93**  
**GROUND WATER PATHWAY TARGETS FOR AQUIFER Chicot**  
**Mobile Waste Controls - 06/30/94**

**PAGE: 26**

**Population by Well**

<b>No.</b>	<b>Well ID</b>	<b>Sample Type</b>	<b>Distance (miles)</b>	<b>Level of Contamination Population</b>
------------	----------------	--------------------	-----------------------------	--

- N/A and/or data not specified

Level I Population Factor: 0.00

Level II Population Factor: 0.00

Potential Contamination by Distance Category

Distance Category (miles)	Population	Value
> 0 to 1/4	5.0	4.00E-01
> 1/4 to 1/2	17.0	1.10E+00
> 1/2 to 1	20.0	5.00E-01
> 1 to 2	168.0	3.00E+00
> 2 to 3	5500.0	6.78E+01
> 3 to 4	0.0	0.00E+00

Potential Contamination Factor: 73.000

Documentation for Target Population > 0 to 1/4 mile Distance Category:

Two private drinking water wells screened in the Chicot Aquifer are located within this distance category. Approximately five people obtain water from private drinking water wells located in this distance category (Ref. 5, pp. 17-20). No public drinking water wells are found within this target distance category (Ref. 11). There is no analytical evidence that any drinking water wells were contaminated (Ref. 5, p. 17). Population was provided in the SSI.

Reference: 5,11

Documentation for Target Population > 1/4 to 1/2 mile Distance Category:

There are seven private wells within this distance category. Approximately 17 people obtain drinking water from wells screened within the Chicot Aquifer located in this distance category (Ref. 5, pp. 5, 17-20). No public drinking water wells are located in this target category (Ref. 11).

Reference: 5,11

**Documentation for Target Population > 1/2 to 1 mile Distance Category:**

**There are seven private drinking water wells screened within the Chicot Aquifer serving an estimated 17 individuals. One industrial well serves the employees of Houston Lighting and Power Company within this distance category. Approximately 3 individuals obtain water from the industrial well at Houston Lighting and Power Company. A total of 20 individuals obtain water from wells located in the 1/2 to 1-mile target distance (Ref. 5, pp. 5, 17-20). No public supply wells are located in this distance category (Ref. 11).**

**Reference: 5,11**

**Documentation for Target Population > 1 to 2 miles Distance Category:**

**70 private wells and eight industrial wells are located in this distance category. It is not known if the industrial wells serve as a drinking water supply; however, it will be assumed they do provide drinking water and are screened within the Chicot Aquifer. Approximately 168 people obtain drinking water from wells screened within the Chicot Aquifer in this distance category (Ref. 5, pp. 5, 17-20). No municipal drinking water wells are located within this target distance limit (Ref. 11).**

**Reference: 5**

**Documentation for Target Population > 2 to 3 miles Distance Category:**

**The City of Houston Water Production stated that the only public drinking water well within 4-miles of the site is the Hobby stand-by well located between 2 and 3 miles of the site. The Hobby stand-by well is screened in the Chicot Aquifer. The Hobby well serves approximately 5,500 individuals.**

**Reference: 11,15**

**Documentation for Target Population > 3 to 4 miles Distance Category:**

**No private or public drinking water wells are located within the 3 to 4-mile radius of the site.**

**Reference: 5,11**

**Nearest Well**

**Level of Contamination: Potential**  
**Distance in miles: 0.25**

**Nearest Well Factor: 2.00E+01**

**Documentation for Nearest Well:**

**A private drinking water well which is screened within the Chicot Aquifer is within 0.25 miles of the site (Ref. 5, p. 5, 17-20).**

**Reference: 5**

**Resources**

**Resource Use: YES**

**Resource Factor: 5.00E+00**

**Documentation for Resources:**

**Irrigation wells been identified within 1/4 mile of the site (Ref. 5, pp. 5, 13-20). It is assumed they are screened within the Chicot Aquifer.**

**Reference: 5**

**Wellhead Protection Area**

There is a designated wellhead protection area

Wellhead Protection Area Factor: 5.00E+00

**Documentation for Wellhead Protection Area:**

One Wellhead Protection Area is within a four-mile radius of the site, the City of Houston Sagemont #2 well located approximately two miles southeast of the site (Ref. 4, p. 20; Ref. 5, p. 17).

**Reference: 4,5**

**PREscore 2.0 - PRESCORE.TCL File 05/11/93**  
**GROUND WATER PATHWAY TARGETS FOR AQUIFER Evangeline**  
**Mobile Waste Controls - 06/30/94**

**PAGE: 31**

**Population by Well**

<b>No.</b>	<b>Well ID</b>	<b>Sample Type</b>	<b>Distance (miles)</b>	<b>Level of Contamination Population</b>
------------	----------------	--------------------	-----------------------------	--

**- N/A and/or data not specified**

**Level I Population Factor: 0.00**

**Level II Population Factor: 0.00**

Potential Contamination by Distance Category

Distance Category (miles)	Population	Value
> 0 to 1/4	0.0	0.00E+00
> 1/4 to 1/2	0.0	0.00E+00
> 1/2 to 1	0.0	0.00E+00
> 1 to 2	0.0	0.00E+00
> 2 to 3	0.0	0.00E+00
> 3 to 4	0.0	0.00E+00

Potential Contamination Factor: 0.000

Nearest Well

Level of Contamination: N.A.

Nearest Well Factor: 0.00E+00

Documentation for Nearest Well:

No private or public drinking water wells within this TDL are screened within the Evangeline Aquifer (Ref. 5, pp. 17-20; Ref. 11; Ref. 15).

Reference: 5,11,15

Resources

Resource Use: NO

Resource Factor: 0.00E+00

**Documentation for Resources:**

**No public or private drinking water wells within a 4-mile radius were identified within the Evangeline Aquifer (Ref.5, p. 17-20; Ref. 11; Ref 15).**

**Reference: 5,11,15**

**Wellhead Protection Area**

**There is a designated wellhead protection area**

**Wellhead Protection Area Factor: 5.00E+00**

**Documentation for Wellhead Protection Area:**

**One Wellhead Protection Area is located within the 4-mile radius of the site. The City of Houston Sagemont #2 well is located approximately 2 miles southeast of the site.**

**Reference: 4,5**

**PREscore 2.0 - PRESCORE.TCL File 05/11/93**  
**SURFACE WATER PATHWAY SEGMENT SUMMARY**  
**Mobile Waste Controls - 06/30/94**

**PAGE: 34**

No. Segment ID	Segment Type	Water Type	Start Point (mi)	End Point (mi)	Average Flow (cfs)
1 Lake Westwind	Lake	Fresh	0.00	15.00	1
2	River	Fresh	15.00	15.00	0

**Documentation for segment: Lake Westwind:**

Surface drainage in the vicinity of the site is generally to the southwest, in the direction of the small lakes formed from excavated sand pits. A potential surface water pathway exists that would allow surface water to drain across and through the fairly thin, and in some places, breached landfill cap material into the nearby Lake Westwind. The PPE is approximately 50 feet from the embankment of Lake Westwind.

Lake Westwind, with a flow rate of < 10 cfs.

It should be noted that two other lakes, Windmill Lake and Bass Lake, are approximately 250 and 125 feet, respectively, from the site. These lakes were not included in this watershed description because they are in separate watersheds.

**Reference: 5**

OBSERVED RELEASE

No. Sample ID	Sample Type	Distance (miles)	Level of Contamination DW HFC Env
---------------	-------------	---------------------	--------------------------------------

- N/A and/or data not specified

=====

Observed Release Factor	0
-------------------------	---

Documentation for Observed Release, Sample none:

No samples were collected which would indicate a release to the sensitive environments (Ref. 6, p. 15-16).

Reference: 4, 6

POTENTIAL TO RELEASE

Potential to Release by Overland Flow

Containment

No.	Source ID	HWQ Value	Containment Value
1	Landfill	2.76E+02	10

=====  
Containment Factor: 10

Documentation for Overland Flow Containment, Source Landfill:

As hazardous substance migration from the source area is evident, this source was assigned a containment factor value of 10 according to Table 4-2 of the HRS (Ref. 1; Ref.4, p. 1). The landfill cover is kept saturated in low-lying areas along Windmill Lakes Boulevard by what appears to be an in-ground sprinkler system. Standing water and marshlike vegetation were apparent in low areas adjacent to the boulevard. Surface water drainage pathways are found across the landfill area (Ref. 5, p. 21).

Reference: 1,4,5

Distance to Surface Water

Distance to Surface Water: 50.0 feet  
Distance to Surface Water Factor: 25

Documentation for Distance to Surface Water:

The landfill is within 50 feet of Lake Westwind, the nearest perennial surface water body. Surface drainage from the site flows south and southwest into the lake. Storm water runoff enters the lake adjacent to the boat area (Ref. 5, pp. 4 & 21).

Reference: 5

Runoff

A. Drainage Area: 45.0 acres

Documentation for Drainage Area:

A drainage area of less than 50 acres was estimated from the map of site in Ref. 5 (entire site area is approximately 21.5 acres). Surface drainage from site flows southwest into Lake Westwind bordering the southwestern edge of the site. Surface water drainage may also occur southwestward along Windmill Landing Boulevard toward the Harris County drainage ditch (Ref. 5, pp. 21 & 23).

Reference: 5

B. 2-year, 24-hour Rainfall: 5.5 inches

Documentation for Rainfall:

The 2-year, 24-hour rainfall is 5.5 inches (Ref. 5, p. 21).

Reference: 5

C. Soil Group: A  
Coarse-textured soils with high infiltration rates

Documentation for Soil Group:

Course textured soils and sands with high infiltration rates (Ref. 4, p. 17).

Reference: 4

Runoff Factor: 1

=====

Potential to Release by Overland Flow Factor: 260

Potential to Release by Flood

No. Source ID	HWQ Value	Flood Containment Value	Flood Frequency Value	Potential to Release by Flood
1 Landfill	2.76E+02	10	7	70

=====

Potential to Release by Flood Factor: 70

Documentation for Flood Containment, Source Landfill:

No documentation was available to support that containment at the source is designed, constructed, operated, and maintained to prevent hazardous substance migration during a flood (Ref. 4, pp. 1 & 20).

Reference: 4

Documentation for Flood Frequency, Source Landfill:

The site is situated in an area of > 500 year floodplain (Ref. 4, p. 20).

Reference: 4

Source: 1 Landfill

Source Hazardous Waste Quantity Value: 275.74

Hazardous Substance	Toxicity Value	Persistence Value	Toxicity/ Persistence Value
Chromium	10000	1.00E+00	1.00E+04
Copper	0	1.00E+00	0.00E+00
Iron	0	1.00E+00	0.00E+00
PCBs	10000	1.00E+00	1.00E+04

Hazardous Substances Found in an Observed Release

Sample No.	Observed Release Hazardous Substance	Toxicity Value	Persistence Value	Toxicity/ Persistence Value
------------	---	-------------------	----------------------	-----------------------------------

---

- N/A and/or data not specified

Toxicity/Persistence Value from Source Hazardous Substances:	1.00E+04
Toxicity/Persistence Value from Observed Release Hazardous Substances:	0.00E+00
Toxicity/Persistence Factor:	1.00E+04
Sum of Source Hazardous Waste Quantity Values:	2.76E+02
Hazardous Waste Quantity Factor:	100
Waste Characteristics Factor Category:	32

Level I Concentrations

- N/A and/or data not specified

Level II Concentrations

- N/A and/or data not specified

Most Distant Level I Sample

- N/A and/or data not specified

Most Distant Level II Sample

- N/A and/or data not specified

**SW PATHWAY: OVERLAND FLOW/FLOOD COMPONENT DRINKING WATER THREAT TARGETS**  
**Mobile Waste Controls - 06/30/94****Level I Concentrations**

---

Intake	Distance Along the In-water Segment from the Probable Point of Entry (miles)	Population
--------	--	------------

---

~ N/A and/or data not specified

---

Population Served by Level I Intakes: 0.0

Level I Population Factor: 0.00E+00

Level II Concentrations

Intake	Distance Along the In-water Segment from the Probable Point of Entry (miles)	Population
--------	--	------------

- N/A and/or data not specified

=====

Population Served by Level II Intakes:	0.0
--	-----

Level II Population Factor: 0.00E+00

Potential Contamination

Intake ID	Average Annual Flow (cfs)	Population Served
- N/A and/or data not specified		

Documentation for Intake :

The surface water body evaluated is Lake Westwind. The lake is self contained and there are no streams flowing out of the lake.  
 There is no drinking water intake within the lake or the other two lakes surrounding the site.

Reference:

Type of Surface Water Body	Total Population	Dilution-Weighted Population
- N/A and/or data not specified		

=====  
 Dilution-Weighted Population Served  
 by Potentially Contaminated Intakes:      0.0

Potential Contamination Factor:      0.0

Nearest Intake

Location of Nearest Drinking Water Intake: N.A.

Nearest Intake Factor:    0.00

Resources

Resource Use: YES

Resource Value: 5.00E+00

**Documentation for Resources:**

**Lake Westwind provides a fishery habitat, and local residents routinely fish from this lake and the other two lakes surrounding the landfill (Ref. 5, p. 25).**

**Reference: 5**

Source: 1 Landfill

Source Hazardous Waste Quantity Value: 275.74

Hazardous Substance	Toxicity Value	Persistence Value	Bio- accum. Value	Toxicity/ Persistence/ Bioaccum. Value
Chromium	10000	1.00E+00	5.00E+00	5.00E+04
Copper	0	1.00E+00	5.00E+04	0.00E+00
Iron	0	1.00E+00	5.00E-01	0.00E+00
PCBs	10000	1.00E+00	5.00E+04	5.00E+08

**SW PATHWAY: OVERLAND/FLOOD HUMAN FOOD CHAIN THREAT WASTE CHARACTERISTICS**  
**Mobile Waste Controls - 06/30/94****Hazardous Substances Found in an Observed Release**

Sample No.	Observed Release Hazardous Substance	Toxicity Value	Persistence Value	Bio- accum. Value	Toxicity/ Persistence/ Bioaccum. Value
------------	---	-------------------	----------------------	-------------------------	---

---

- N/A and/or data not specified

Toxicity/Persistence/Bioaccumulation Value from Source Hazardous Substances:	5.00E+08
Toxicity/Persistence/Bioaccumulation Value from Observed Release Hazardous Substances:	0.00E+00
Toxicity/Persistence/Bioaccumulation Factor:	5.00E+08
Sum of Source Hazardous Waste Quantity Values:	2.76E+02
Hazardous Waste Quantity Factor:	100
Waste Characteristics Factor Category:	320

Level I Concentrations

- N/A and/or data not specified

Level II Concentrations

- N/A and/or data not specified

Most Distant Level I Sample

- N/A and/or data not specified

Most Distant Level II Sample

- N/A and/or data not specified

Level I Concentrations

Fishery	Annual Production (pounds)	Human Food Chain Population Value
---------	-------------------------------	--------------------------------------

- N/A and/or data not specified

=====

Sum of Human Food Chain Population Values: 0.00E+00

Level I Concentrations Factor: 0.00E+00

Level II Concentrations

Fishery	Annual Production (pounds)	Human Food Chain Population Value
---------	-------------------------------	--------------------------------------

- N/A and/or data not specified

=====

Sum of Human Food Chain Population Values: 0.00E+00

Level II Concentrations Factor: 0.00E+00

Potential Contamination

Fishery	Annual Production (pounds)	Type of Surface Water Body	Average Annual Flow (cfs)	Pop. Value (Pi)	Dilution Weight (Di)	Pi*Di
1 Lake Westwind	99.0	Lake	1	0.0	1.00E+00	3.00E-02

Sum of (Pi\*Di): 3.00E-02

Potential Human Food Chain Contamination Factor: 3.00E-03

Documentation for Lake Westwind Fishery:

Residents fish in Lake Westwind, as well as the other two lakes surrounding the landfill (Ref. 5, p. 25).

An annual fishery production of 0 to 100 pounds was assumed since no production data for the lake was available.

An average annual flow of less than 10 cfs was assumed (HRS Table 4-13).

Reference: 1,5

Food Chain Individual

Location of Nearest Fishery: Lake Westwind  
 Distance from the Probable Point of Entry: 0.00 miles  
 Type of Surface Water Body: Lake  
 Dilution Weight: 1.0000000  
 Level of Contamination: Potential

Food Chain Individual Factor: 20.00

Documentation for Lake Westwind:

Surface drainage in the vicinity of the site is generally to the southwest, in the direction of the small lakes formed from excavated sand pits. A potential surface water pathway exists that would allow surface water to drain across and through the fairly thin, and in some places, breached landfill cap material into the nearby Lake Westwind. The PPE is approximately 50 feet from the embankment of Lake Westwind.

Lake Westwind, with a flow rate of < 10 cfs.

It should be noted that two other lakes, Windmill Lake and Bass Lake, are approximately 250 and 125 feet, respectively, from the site. These lakes were not included in this watershed description because they are in separate watersheds.

Reference: 5

Source: 1 Landfill

Source Hazardous Waste Quantity Value: 275.74

Hazardous Substance	Eco- toxicity Value	Persistence Value	Bio- accum. Value	Ecotoxicity/ Persistence/ Bioaccum. Value
Chromium	10000	1.00E+00	5.00E+00	5.00E+04
Copper	100	1.00E+00	5.00E+04	5.00E+06
Iron	10	1.00E+00	5.00E-01	5.00E+00
PCBs	10000	1.00E+00	5.00E+04	5.00E+08

Hazardous Substances Found in an Observed Release

Sample No.	Observed Release Hazardous Substance	Eco- toxicity Value	Persistence Value	Bio- accum. Value	Ecotoxicity/ Persistence/ Bioaccum. Value
------------	---	---------------------------	----------------------	-------------------------	--

---

- N/A and/or data not specified

Ecotoxicity/Persistence/Bioaccumulation Value from Source Hazardous Substances:	5.00E+08
Ecotoxicity/Persistence/Bioaccumulation Value from Observed Release Hazardous Substances:	0.00E+00
Ecotoxicity/Persistence/Bioaccumulation Factor:	5.00E+08
Sum of Source Hazardous Waste Quantity Values:	2.76E+02
Hazardous Waste Quantity Factor:	100
Waste Characteristics Factor Category:	320

Level I Concentrations

- N/A and/or data not specified

Level II Concentrations

- N/A and/or data not specified

Most Distant Level I Sample

- N/A and/or data not specified

Most Distant Level II Sample

- N/A and/or data not specified

Level I Concentrations

Sensitive Environment	Distance from Probable Point of Entry to Sensitive Env. (miles)	Sensitive Environment Value
- N/A and/or data not specified		

Sum of Sensitive Environments Values: 0

Wetlands

Wetland	Distance from Probable Point of Entry to Wetland (miles)	Wetlands Frontage (miles)
- N/A and/or data not specified		

Total Wetlands Frontage: 0.00 Miles Total Wetlands Value: 0

=====

Sum of Sensitive Environments Value + Wetlands Value: 0.00E+00

Level I Concentrations Factor: 0.00E+00

Level II Concentrations

Sensitive Environment	Distance from Probable Point of Entry to Sensitive Env. (miles)	Sensitive Environment Value
- N/A and/or data not specified		

Sum of Sensitive Environments Values: 0

Wetlands

Wetland	Distance from Probable Point of Entry to Wetland (miles)	Wetlands Frontage (miles)
- N/A and/or data not specified		

Total Wetlands Frontage: 0.00 Miles Total Wetlands Value: 0

=====

Sum of Sensitive Environments Value + Wetlands Value: 0.00E+00

Level II Concentrations Factor: 0.00E+00

Potential Contamination

Sensitive Environments

Type of Surface	Sensitive Environment	Sensitive Environment Value
Water Body		

Wetlands

Type of Surface	Sensitive Environment	Wetlands Frontage	Wetlands Value
Water Body			

- N/A and/or data not specified

Type of Surface	Sum of Sens. Environment Values(Sj)	Sum of Wetland Frontage Values(Wj)	Dilution Weight (Dj)	Dj(Wj+Sj)
Water Body				

- N/A and/or data not specified

Sum of Dj(Wj+Sj): 0.00E+00  
 Sum of Dj(Wj+Sj)/10: 0.00E+00

=====

Potential Contamination Sensitive Environment Factor: 0.00E+00

Likelihood of Exposure

No. Source ID Level of Contamination

1	Landfill	Level I
---	----------	---------

Likelihood of Exposure Factor: 550

Documentation for Area of Contamination, Source Landfill:

Chromium, copper, and PCBs were detected in soil samples collected from the landfill. The area of the landfill (937,500 sq. feet) was used as the area of contamination since a soil sample established observed contamination in the landfill. The entire area of the landfill was considered the area of observed contamination.

Reference: 1,5

Source Hazardous Substance No.	Depth (ft.)	Concent.	Cancer	RFD	Units
1 Chromium	> 2	7.6E+01	0.0E+00	0.0E+00	ppm
1 Copper	> 2	5.0E+01	0.0E+00	0.0E+00	ppm
1 Iron	> 2	3.1E+01	0.0E+00	0.0E+00	ppm
1 PCBs	< 2	1.8E+00	7.6E-02	0.0E+00	ppm

Documentation for Source Landfill, Contaminants:

Chemical analyses of soil samples collected around the area of the landfill detected the presence of chromium, copper, and aroclor in concentrations three times above the background sample (SO 3) concentrations: Chromium (14.1 ppm); Copper (7.7 ppm); Aroclor-1248 (< .037 ppm); Aroclor-1254 (0.099 ppm).

Chromium (76.5 ppm) and copper (50.3 ppm) were found in Station SO-10 and aroclor-1248 (1.8 ppm) and aroclor-1254 (1.2 ppm) in Station SO 1.

Chromium (0.015 ppm), iron (30.8 ppm) and copper (0.159 ppm) were detected in monitoring well sample GW-7 (Monitoring Well 10) (Ref.

6, pp. 9, 18-19).

The greatest concentration found in either the soil or ground water samples were used to characterize the source.

Reference: 6

Source: 1 Landfill

Source Hazardous Waste Quantity Value: 27.57

Hazardous  
Substance

Toxicity  
Value

---

PCBs

10000

Toxicity Factor:	1.00E+04
Sum of Source Hazardous Waste Quantity Values:	2.76E+01
Hazardous Waste Quantity Factor:	10
Waste Characteristics Factor Category:	18

Targets

Level I Population: 0.0 Value: 0.00

Level II Population: 0.0 Value: 0.00

Documentation for Level II Population:

There are 718 resident individuals (299 units from 3 apartment complexes) living within 200 feet of the site, but the apartments are not within the property boundary of the site and cannot be considered as residential population (Ref. 5, p. 26).

Reference: 5

Workers: 0.0 Value: 0.00

Documentation for Workers:

No workers at the site or at nearby facilities in areas of observed contamination. The site is inactive (Ref. 5, p. 25).

Reference: 5

Resident Individual: Potentia Value: 0.00

Resources: NO Value: 0.00

Documentation for Resources:

No resources are present on-site.

Reference: 4,5

Terrestrial Sensitive Environment	Value
-----------------------------------	-------

- N/A and/or data not specified	
---------------------------------	--

=====

Terrestrial Sensitive Environments Factor: 0.00

Documentation for Terrestrial Environment :

It is not known whether any terrestrial sensitive environments exist on-site.

Reference:

Likelihood of Exposure

No. Source ID	Level of Contamination	Attractiveness/ Accessibility	Area of Contam. (sq. feet)
1 Landfill	Level I	75	937500
Highest Attractiveness/Accessibility Value: 75			
Sum of Eligible Areas Of Contamination (sq. feet):			937500
Area of Contamination Value: 100			

Likelihood of Exposure Factor Category: 500

Documentation for Attractiveness/Accessibility, Source Landfill:

A fence is around the site, but it is breached and provides no security. Residents have been seen boating and fishing on-site. A road transects the landfill (Ref. 4, p. 1).

Reference: 4

Source Hazardous Substance No.	Depth (ft.)	Concent.	Cancer	RFD	Units
1 Chromium	> 2	7.6E+01	0.0E+00	0.0E+00	ppm
1 Copper	> 2	5.0E+01	0.0E+00	0.0E+00	ppm
1 Iron	> 2	3.1E+01	0.0E+00	0.0E+00	ppm
1 PCBs	< 2	1.8E+00	7.6E-02	0.0E+00	ppm

Documentation for Source Landfill, Contaminants:

Chemical analyses of soil samples collected around the area of the landfill detected the presence of chromium, copper, and aroclor in concentrations three times above the background sample (SO 3) concentrations: Chromium (14.1 ppm); Copper (7.7 ppm); Aroclor-1248 (< .037 ppm); Aroclor-1254 (0.099 ppm).

Chromium (76.5 ppm) and copper (50.3 ppm) were found in Station SO-10 and aroclor-1248 (1.8 ppm) and aroclor-1254 (1.2 ppm) in Station SO 1.

Chromium (0.015 ppm), iron (30.8 ppm) and copper (0.159 ppm) were detected in monitoring well sample GW-7 (Monitoring Well 10) (Ref. 6, pp. 9, 18-19).

The greatest concentration found in either the soil or ground water samples were used to characterize the source.

Reference: 6

Source: 1 Landfill

Source Hazardous Waste Quantity Value: 27.57

Hazardous  
Substance

Toxicity  
Value

---

PCBs

10000

<b>Toxicity Factor:</b>	<b>1.00E+04</b>
<b>Sum of Source Hazardous Waste Quantity Values:</b>	<b>2.76E+01</b>
<b>Hazardous Waste Quantity Factor:</b>	<b>10</b>
<b>Waste Characteristics Factor Category:</b>	<b>18</b>

Nearby Individual

Population within 1/4 mile: 1946.0

Nearby Individual Value: 1.0

Population Within 1 Mile

Travel Distance Category	Number of People	Value
> 0 to 1/4 mile	1946.0	4.1
> 1/4 to 1/2 mile	499.0	0.7
> 1/2 to 1 mile	8994.0	3.3

Population Within 1 Mile Factor: 8.0

Documentation for Population > 0 to 1/4 mile Distance Category:

According to the PA, the approximate total population is 1,946. The population was derived from the following data (Ref. 4, p. 23):

Windmill Landing	259 units x 2.4 people/unit = 622 people
The Point	160 units x 2.4 people/unit = 384 people
The Cove	392 units x 2.4 people/unit = 940 people

Reference: 4

Documentation for Population > 1/4 to 1/2 mile Distance Category:

According to the Geographical Exposure Modeling System (TGEMS) 499 people live in the 1/4 to 1/2-mile target radius of the site (Ref. 8).

Reference: 8

Documentation for Population > 1/2 to 1 mile Distance Category:

According to TGEMS, 8994 people live in the 1/2 to 1-mile target radius (Ref. 8).

Reference: 8

**OBSERVED RELEASE**

<b>No. Sample ID</b>	<b>Distance (miles)</b>	<b>Level of Contamination</b>
----------------------	-----------------------------	-------------------------------

---

- N/A and/or data not specified

=====

**Observed Release Factor: 0**

**Documentation for Sample :**

**No analytical sampling data was conducted.**

**Reference:**

Gas Migration Potential

GAS POTENTIAL TO RELEASE

Source ID	Source Type	Gas Contain. Value (A)	Gas Source Type Value (B)	Gas Migrtn. Potent. Value (C)	Sum (B+C)	Gas Potential to Rel. Value A(B+C)
Landfill	Landfill	10	33	11	44	440

Gas Potential to Release Factor: 440

Documentation for Gas Containment, Source Landfill:

Because the cover on the landfill has been breached, the source was assigned a gas containment factor value of 10 according to Table 6-3 of the HRS; the breached cover shows evidence of waste exposure, leakage, air emissions, and erosion (Ref. 1; Ref. 4, p. 1). When Windmill Lakes Boulevard was constructed across the landfill site during construction of the Windmill Lakes subdivision, the landfill cap was disturbed by surveying and construction, resulting in exposure of waste material, which was subsequently covered with additional soil. The thickness of the final cover of the capped disposal area varies from less than 6 inches over the large, central portions of the area, to over 6 feet in areas along the north side of the closed landfill. Exposed waste materials were observed in numerous bare soil areas, apparently where the landfill cap is thin (Ref. 5, p. 6-8).

Reference: 1,4,5

Documentation for Source Type, Source Landfill:

The site was operated as a sand quarrying operation and 5 sandpits were located on-site. In 1970, one of the sandpits (Area A) was converted into a landfill, after the City Public Health Department issued a permit. The landfill was capped, but construction of a road transversing the landfill breached the cap in the early 1980's (Ref.

**PREscore 2.0 - PRESCORE.TCL File 05/11/93**  
**AIR PATHWAY LIKELIHOOD OF RELEASE**  
**Mobile Waste Controls - 06/30/94**

**PAGE: 78**

**4, pp. 1-2).**

**Reference: 4**

Source: Landfill

Gaseous Hazardous Substance	Hazardous Substance Gas Migration Potential Value
PCBs	11

Average of Gas Migration Potential Value for 3 Hazardous Substances: 11.000

=====

Gas Migration Potential Value From Table 6-7: 11

Particulate Migration Potential

PARTICULATE POTENTIAL TO RELEASE

Source ID	Source Type	Partic. Contain. Value (A)	Partic. Source Type Value (B)	Partic. Migrtn. Potent. Value (C)	Sum (B+C)	Partic. Potential to Rel. Value A(B+C)
Landfill	Landfill	10	22	0	22	220

Particulate Potential to Release Factor: 220

Documentation for Particulate Containment, Source Landfill:

Because the cover on the landfill has been breached, the source was assigned a particulate containment factor value of 10 according to Table 6-9 of the HRS (Ref. 1; Ref. 4, p. 10). When Windmill Lakes Boulevard was constructed across the landfill site during construction of the Windmill Lakes subdivision, the landfill cap was disturbed by surveying and construction, resulting in exposure of waste material, which was subsequently covered with additional soil.

The thickness of the final cover of the capped disposal area varies from less than 6 inches over the large, central portions of the area to over 6 feet in areas along the north side of the closed landfill.

Exposed waste materials were observed in numerous bare soil areas, apparently where the landfill cap is thin (Ref. 5, p. 6-8).

Reference: 1,4,5

Documentation for Source Type, Source Landfill:

The site was operated as a sand quarrying operation and 5 sandpits were located on-site. In 1970, one of the sandpits (Area A) was converted into a landfill, after the City Public Health Department issued a permit. The landfill was capped, but construction of a road transversing the landfill breached the cap in the early 1980's (Ref.

**PREscore 2.0 - PRESCORE.TCL File 05/11/93**  
**AIR PATHWAY LIKELIHOOD OF RELEASE**  
**Mobile Waste Controls - 06/30/94**

**PAGE: 81**

**4, pp. 1-2).**

**Reference: 4**

**Source: Landfill**

**Particulate Hazardous Substance**

---

**Chromium**  
**Copper**  
**Iron**

**PREscore 2.0 - PRESCORE.TCL File 05/11/93**  
**AIR PATHWAY WASTE CHARACTERISTICS**  
**Mobile Waste Controls - 06/30/94**

**PAGE: 83**

**Source: 1 Landfill**

**Source Hazardous Waste Quantity Value: 275.74**

<b>Hazardous Substance</b>	<b>Toxicity Value</b>	<b>Gas Mobility Value</b>	<b>Particulate Mobility Value</b>	<b>Toxicity/ Mobility Value</b>
Chromium	10000	NA	2.00E-05	2.00E-01
Copper	100	NA	2.00E-05	2.00E-03
Iron	100	NA	2.00E-05	2.00E-03
PCBs	10000	1.00E+00	NA	1.00E+04

Hazardous Substances Found in an Observed Release

Sample Observed Release ID Hazardous Substance	Particulate Toxicity/ Mobility Value	Gas Toxicity/ Mobility Value
---	--	------------------------------------

---

- N/A and/or data not specified

Toxicity/Mobility Value from Source Hazardous Substances:	1.00E+04
Toxicity/Mobility Value from Observed Release Hazardous Substances:	0.00E+00
Toxicity/Mobility Factor:	1.00E+04
Sum of Source Hazardous Waste Quantity Values:	2.76E+02
Hazardous Waste Quantity Factor:	100
Waste Characteristics Factor Category:	32

**PREscore 2.0 - PRESCORE.TCL File 05/11/93**  
**AIR PATHWAY TARGETS**  
**Mobile Waste Controls - 06/30/94**

**PAGE: 86**

**Actual Contamination**

<b>No. Sample ID</b>	<b>Distance (miles)</b>	<b>Level of Contamination</b>
----------------------	-----------------------------	-------------------------------

- N/A and/or data not specified

**Potential Contamination**

**Distance Categories Subject  
to Potential Contamination**

	<b>Population</b>	<b>Value</b>
Onsite	0.0	0.0000
> 0 to 1/4 mile	1947.0	40.8000
> 1/4 to 1/2 mile	499.0	2.8000
> 1/2 to 1 mile	8994.0	8.3000
> 1 to 2 miles	29273.0	8.3000
> 2 to 3 miles	45625.0	12.0000
> 3 to 4 miles	42564.0	7.3000

**Potential Contaminantion Factor: 79.0000**

**Documentation for Population Onsite Distance Category:**

**No residents are located on the approximate area of the landfill  
(Ref. 4, p. 23).**

**Reference: 4**

**Documentation for Population > 0 to 1/4 mile Distance Category:**

**1946 apartment residents are with 1/4 mile of the site (Ref. 4, p.  
23).**

**Reference: 4**

**Documentation for Population > 1/4 to 1/2 mile Distance Category:**

**According to TGEMS, 499 people live in the 1/4 to 1/2-mile target distance (Ref. 8).**

**Reference: 8**

**Documentation for Population > 1/2 to 1 mile Distance Category:**

**According to TGEMS, 8,994 people live in the 1/2 to 1-mile target radius (Ref. 8).**

**Reference: 8**

**Documentation for Population > 1 to 2 miles Distance Category:**

**According to TGEMS, 29,273 people live in the 1 to 2-mile target distance (Ref. 8).**

**Reference: 8**

**Documentation for Population > 2 to 3 miles Distance Category:**

**According to TGEMS, 45,625 people live in the 2 to 3-mile target distance (Ref. 8).**

**Reference: 8**

**AIR PATHWAY TARGETS**

**Mobile Waste Controls - 06/30/94**

**Documentation for Population > 3 to 4 miles Distance Category:**

**According to TGEMS, 42,564 people live in the 3 to 4-mile target distance.**

**Reference: 8**

**Nearest Individual Factor**

Level of Contamination: Potential  
Distance in miles: 0 to 1/8

Nearest Individual Value: 20

**Documentation for Nearest Individual:**

**Residents are located within 1/8 mile of the site and receives a nearest individual score 20 (Ref. 5, p. 26).**

**Reference: 1,5**

**Resources**

Resource Use: YES

Resource Value: 5

**Documentation for Resources:**

**Beverly Hills Park (i.e., a major or designated recreation area) is 0.2 miles southeast of the site (Ref. 5, p. 27).**

**Reference: 5**

Actual Contamination, Sensitive Environments

Sensitive Environment	Distance (miles)	Sensitive Environment Value
- N/A and/or data not specified		

Actual Contamination, Wetlands

Distance Category	Wetland Acreage	Wetland Acreage Value
- N/A and/or data not specified		

=====

Sensitive Environments Actual Contamination Factor: 0.000  
(Sum of Sensitive Environments + Wetlands Values)

Potential Contamination, Sensitive Environments

Sensitive Environment	Distance (miles)	Sensitive Environment Value	Distance Weight	Weighted Value/10
Houston Toad	3.900	75	0.0014	0.011
Smooth Green Snake	3.900	75	0.0014	0.011
Texas Windmill Gras	3.900	75	0.0014	0.011
H. Machaeranthera	3.900	75	0.0014	0.011
Sum of Sensitive Environments Weighted Values/10:				0.042

Potential Contamination, Wetlands

Distance Category	Wetland Acreage	Wetland Acreage Value	Distance Weight	Weighted Value/10
- N/A and/or data not specified				

=====

Sensitive Environment Potential Contamination Factor: 0.042

Documentation for Sensitive Environment Houston Toad:

The Houston Toad is both a state and federally endangered species. The toad has been located within a 4-mile radius, but not in large numbers since the 1970's (Ref. 9).

Reference: 9

**Documentation for Sensitive Environment Smooth Green Snake:**

**The Smooth Green Snake is on the Texas Endangered Species list and possibly located within a 4-mile radius of the site (Ref. 9).**

**Reference: 9**

**Documentation for Sensitive Environment Texas Windmill Gras:**

**Texas Windmill Grass, a federal category 2 grass, is located within a 4-mile radius of the site (Ref. 9).**

**Reference: 9**

**Documentation for Sensitive Environment H. Machaeranthera:**

**Houston Machaeranthera Grass, a federal category 2 grass, is located within a 4-mile radius of the site (Ref. 9).**

**Reference: 9**

**REFERENCES**

**Mobile Waste Controls - 06/30/94**

1. U.S. Environmental Protection Agency. Final Rule Hazard Ranking System. FR-51531-51667. December 14, 1990.
2. U.S. Environmental Protection Agency. PREscore Software: User's Manual and Tutorial. Version 1.2, EPA/540/R-92/005. September 1991.
3. Superfund Chemical Data Matrix. Appendices B-1, B-2, and C. October 1992.
4. Seils, Allan M. Preliminary Assessment Report for Mobile Waste Controls, Incorporated Site. December 19, 1991.
5. Screening Site Inspection Report, Part 1 for Mobile Waste Controls, Incorporated Site. December 1992.
6. Screening Site Inspection Report, Part 2 for Mobile Waste Controls, Incorporated Site. April 1993.

## **PREscore DOCUMENTATION LOG SHEET**

**SITE:** MOBILE WASTE CONTROLS

**IDENTIFICATION NUMBER:** TXD988051652

**CITY:** HOUSTON

**STATE:** TEXAS

<b>REFERENCE NUMBER</b>	<b>DESCRIPTION OF THE REFERENCE</b>
1	U.S. Environmental Protection Agency. Final Rule Hazard Ranking System. FR-51431-51667. December 14, 1990.
2	U.S. Environmental Protection Agency. PREscore Software: User's Manual and Tutorial. Version 1.0, EPA/540/R-92/005. September 1991.
3	Superfund Chemical Data Matrix. Appendices B-1, B-2 and C. October 1992.
4	Seils, Allan M. Preliminary Assessment Report for Mobile Waste Controls, Incorporated Site. Prepared by the Texas Water Commission (TWC) for the U.S. Environmental Protection Agency. December 19, 1991.
5	Screening Site Inspection Report, Part 1 for Mobile Waste Controls, Incorporated Site. Prepared by the Texas Water Commission (TWC) for the U.S. Environmental Protection Agency. December 1992.
6	Screening Site Inspection Report, Part 2 for Mobile Waste Controls, Incorporated Site. Prepared by the Texas Water Commission (TWC) for the U.S. Environmental Protection Agency. December 1992.
7	Letter. HRS Net Precipitation Values. From: Andrew M. Platt, Group Leader, MITRE Corporation. To: Lucy Sibold, U.S. Environmental Protection Agency. May 26, 1988.
8	U.S. Environmental Protection Agency, Geographical Exposure Modeling Systems (TGEMS) Database, compiled from the U.S. Census Bureau 1990 data accessed by Angela K. Jones. November 10, 1993.

**PREscore DOCUMENTATION LOG SHEET**

Continued

<b>REFERENCE NUMBER</b>	<b>DESCRIPTION OF THE REFERENCE</b>
9	Record of Communication. Endangered Species at Mobile Waste Site. To: Shannon Breslin, Texas Parks and Wildlife. From: Carolyn Kelly, Engineering Science, Inc. December 10, 1992.
10	U.S. Department of the Interior U.S. Geological Survey. Dana I. Barbei, Mark C. Kasmarek, and Al Campodonico. Approximate Water-Level Changes in Wells Completed in the Chicot and Evangelina Aquifers, 1977-91 and 1990-91, and Measured Compaction, 1973-90, in the Houston-Galveston Region, Texas. U.S. Geological Survey Open-File Report 91-94.
11	Record of Communication. Water Wells within a 4-Mile Radius of Mobile Waste Controls. To: Vicki Harting, Ecology & Environment, Inc. From: Rudy Hodge, City of Houston Water Production. May 17, 1994.
12	U.S. Department of Agriculture Soil Conservation Service. Soil Survey of Harris County, Texas.
13	Texas Water Development Board. Ground-Water Data for Harris county, Texas. Volume I. Drillers' Logs of Wells, 1905-71.
14	Texas Department of Water Resources. Report 289. Digital Models for Simulation of Ground-Water Hydrology of the Chicot and Evangeline aquifers Along the Gulf of Coast of Texas. May 1985.
15	Record of Communication. Hobby Stand-by Well Aquifer. To: Rudy Hodge, City of Houston Water Production. From: Vicki Harting, Ecology & Environment, Inc. June 24, 1994.